

CLAIMS:

1. A system for allowing underwater escape from a submarine comprising:
 - a plurality of walls forming an interior configured to receive at least one person, said plurality of walls configured to resist collapse due to a force of external water;
 - a lower escape tower connector located at a bottom end of said plurality of walls, said lower escape tower connector configured to sealingly attach to a hatch connector of a submerged submarine;
 - means for selectively maintaining said interior substantially free of the water;
 - a hatch formed in said plurality of walls, said hatch being selectively openable to allow a person to pass therethrough.
2. The system of claim 1 further comprising an escape tunnel connectable to an upper end of said escape tower, said tunnel comprising a lower tunnel connector configured to sealingly connect to said escape tower.
3. The system of claim 2 further comprising an upper escape tower connector located at an upper end of said plurality of walls, said upper escape tower connector configured to sealingly connect to a lower escape tunnel connector of said escape tunnel.
4. The system of claim 3 wherein said tunnel is configured to allow a person to pass therethrough from said interior of said tower to an air-water interface at a top of a water column above the submarine.
5. The system of claim 3 wherein said tunnel comprises a plurality of riser tubes connected to each other.
6. The system of claim 5 further comprising an alignment-compensator connected to two of said plurality of riser tubes.

7. The system of claim 6 wherein the alignment-compensator comprises a blowout diverter.
8. The system of claim 5 further comprising a flexible joint connected to two of said plurality of riser tubes
9. The system of claim 1 wherein said walls comprise high strength, low alloy steel.
10. The system of claim 1 wherein said hatch connector comprises a submerged wellhead connector and said lower escape tower connector is configured to sealingly connect to said submerged wellhead connector.
11. A method for allowing underwater escape from a submarine, the method comprising:
 - attaching a lower escape tower connector of an escape tower to a escape hatch connector of a submerged submarine to sealingly attach a lower end of the escape tower to the submarine;
 - replacing water in an interior of the escape tower with air;
 - opening an exterior hatch of the submarine and passing a person through the hatch into the interior;
 - discharging air from the interior of the escape tower;
 - opening a hatch of the escape tower;
 - ascending the person to a water surface utilizing an escape hood.
12. The method of claim 11 wherein the attaching the lower escape tower connector to the hatch connector of the submerged submarine comprises remotely attaching the lower escape tower connector utilizing a drill string.
13. The method of claim 11 wherein the replacing the water in an interior of the escape tower comprises remotely providing air to the interior utilizing a drill string.

14. The method of claim 11 wherein the lower escape tower connector comprises a connector configured to connect a drilling riser tube to a submerged wellhead connector and wherein the hatch connector of the submerged submarine comprises a submerged wellhead connector.

15. The method of claim 11 wherein the interior of the escape tower is configured to allow a person to be received therein and to pass therethrough.

16. A method for allowing underwater escape from a submarine, the method comprising:

attaching a lower escape tower connector of an escape tower to a hatch connector of a submerged submarine to sealingly attach a lower end of the escape tower to the submarine;

attaching a first riser tube to an upper escape tower connector of the escape tower;

forming an escape tunnel by attaching a second riser tube to the first riser tube;

replacing water in an interior of the escape tower and a tunnel interior of the escape tunnel with air;

opening an exterior hatch of the submarine and passing a person through the hatch;

raising the person to water's surface through the tunnel.

17. The method of claim 16 wherein the first riser tube and the second riser tube comprise drilling riser tubes configured for use in drilling undersea petroleum wells.

18. The method of claim 16 wherein the raising comprises the person being received in a harness and the person being raised to the surface by a winch connected to the harness by a cable.

19. The method of claim 16 further comprising attaching an elbow fitting between the hatch connector and the escape tower.

20. The method of claim 19 wherein the elbow fitting comprises a lower elbow connector and an upper elbow connector and further comprising connecting the lower elbow connector to the hatch connector and the upper elbow fitting to the upper escape tower connector.
21. The method of claim 16 wherein the attaching the lower escape tower connector to the hatch connector comprises remotely attaching the lower escape tower connector utilizing a drill string.
22. The method of claim 16 wherein the replacing the water in an interior of the escape tower comprises remotely providing air to the interior utilizing a drill string.
23. The method of claim 16 wherein the hatch connector comprises a submerged wellhead connector and wherein the lower escape tower connector comprises a lower escape tunnel connector configured to connect a drilling riser tube to the submerged wellhead connector.
24. The method of the 16 wherein the first riser tube and the second riser tube comprise riser tubes of a plurality of riser tubes of the tunnel and further comprising attaching an alignment-compensator between two riser tubes of the plurality of riser tubes of the tunnel utilizing a drill string.
25. The method of claim 24 wherein the alignment-compensator comprises a blowout diverter.
26. The method of claim 16 wherein the first riser tube and the second riser tube comprise riser tubes of a plurality of riser tubes of the tunnel and further comprising attaching a flexible joint between two riser tubes of the plurality of riser tubes of the tunnel utilizing a drill string.
27. The method of claim 16 further comprising attaching the hatch connector of the submarine to the submarine by attaching a hatch assembly to the submarine.

28. The method of claim 27 further comprising drilling a hole in the submarine to allow a person to pass through the hole and through the hatch assembly into at least one of the interior the escape tower and an escape tunnel.

29. A method for allowing underwater escape from a submarine, the method comprising:

attaching a hatch assembly to the exterior of the submarine when the submarine is submerged;

attaching an escape tower to a connector of the hatch assembly;

attaching an escape tunnel to the escape tower;

sealing the hatch assembly relative to the exterior of the submarine;

attaching a drilling guide to the escape tower; and

drilling a hole in a wall of the submarine through the drilling guide.

30. The method of claim 29 further comprising attaching hull weld lugs to the exterior of the submarine.

31. The method of claim 30 further comprising attaching an escape tower to the weld lugs via a cable.

32. The method of claim 29 wherein the sealing comprises sealing the hatch assembly to the submarine by welding an interior weld on an interior surface of the hatch assembly.

33. The method of claim 29 wherein the hatch assembly further comprises a low temperature seal for sealing the hatch assembly relative to the exterior.